

### **OIL ANALYSIS REPORT**

## Sample Rating Trend

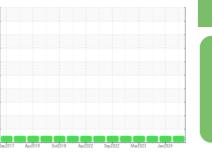
# **NORMAL**



## COLORADO/443/TR - LOADER 46.85L [COLORADO^443^TR - LOADER]

Hydraulic System

MOBIL MOBILTRANS AST 30 (-





#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

#### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

#### **Fluid Condition**

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| AST 30 ( GAL)   |       | Sep 2017 Ap  | ir2018 Oct2018 Apr | 2022 Sep2022 Mar2023 | Jan 2024    |             |
|-----------------|-------|--------------|--------------------|----------------------|-------------|-------------|
| SAMPLE INFORMA  | ATION | method       | limit/base         | current              | history1    | history2    |
| Sample Number   |       | Client Info  |                    | WC0928683            | WC0884075   | WC0823063   |
| Sample Date     |       | Client Info  |                    | 07 May 2024          | 31 Jan 2024 | 31 Aug 2023 |
| Machine Age     | hrs   | Client Info  |                    | 10106                | 9966        | 9622        |
| Oil Age         | hrs   | Client Info  |                    | 140                  | 0           | 574         |
| Oil Changed     |       | Client Info  |                    | Not Changd           | Changed     | Not Changd  |
| Sample Status   |       |              |                    | NORMAL               | NORMAL      | NORMAL      |
| CONTAMINATION   |       | method       | limit/base         | current              | history1    | history2    |
| Water           |       | WC Method    | >0.1               | NEG                  | NEG         | NEG         |
| WEAR METALS     |       | method       | limit/base         | current              | history1    | history2    |
| ron             | ppm   | ASTM D5185m  | >20                | 4                    | 5           | 3           |
| Chromium        | ppm   | ASTM D5185m  | >10                | 0                    | <1          | 0           |
| Nickel          | ppm   | ASTM D5185m  | >10                | 0                    | 0           | 0           |
| Γitanium        | ppm   | ASTM D5185m  |                    | <1                   | 0           | 0           |
| Silver          | ppm   | ASTM D5185m  |                    | 0                    | 0           | 0           |
| Aluminum        | ppm   | ASTM D5185m  | >10                | 2                    | 2           | 4           |
| _ead            | ppm   | ASTM D5185m  | >10                | 0                    | 0           | <1          |
| Copper          | ppm   | ASTM D5185m  | >75                | 4                    | 2           | 2           |
| Γin             | ppm   | ASTM D5185m  | >10                | <1                   | 0           | 0           |
| /anadium        | ppm   | ASTM D5185m  |                    | 0                    | 0           | <1          |
| Cadmium         | ppm   | ASTM D5185m  |                    | 0                    | 0           | 0           |
| ADDITIVES       |       | method       | limit/base         | current              | history1    | history2    |
| Boron           | ppm   | ASTM D5185m  |                    | 30                   | 24          | 25          |
| Barium          | ppm   | ASTM D5185m  |                    | 0                    | 5           | 0           |
| Molybdenum      | ppm   | ASTM D5185m  |                    | 0                    | 0           | 1           |
| Manganese       | ppm   | ASTM D5185m  |                    | 1                    | 0           | 0           |
| Magnesium       | ppm   | ASTM D5185m  |                    | 13                   | 13          | 11          |
| Calcium         | ppm   | ASTM D5185m  |                    | 3152                 | 3064        | 3301        |
| Phosphorus      | ppm   | ASTM D5185m  |                    | 1012                 | 824         | 957         |
| Zinc            | ppm   | ASTM D5185m  |                    | 1221                 | 1212        | 1214        |
| Sulfur          | ppm   | ASTM D5185m  |                    | 5364                 | 4110        | 4881        |
| CONTAMINANTS    |       | method       | limit/base         | current              | history1    | history2    |
| Silicon         | ppm   | ASTM D5185m  | >20                | 6                    | 7           | 7           |
| Sodium          | ppm   | ASTM D5185m  |                    | 2                    | 0           | 2           |
| Potassium       | ppm   | ASTM D5185m  | >20                | 0                    | 2           | 0           |
| FLUID CLEANLINE | ESS   | method       | limit/base         | current              | history1    | history2    |
| Particles >4µm  |       | ASTM D7647   |                    | 626                  | 2222        | 3227        |
| Particles >6µm  |       | ASTM D7647   | >2500              | 129                  | 71          | 116         |
| Particles >14µm |       | ASTM D7647   | >640               | 16                   | 7           | 11          |
| Particles >21µm |       | ASTM D7647   | >160               | 6                    | 2           | 2           |
| Particles >38µm |       | ASTM D7647   | >40                | 0                    | 1           | 0           |
| Particles >71µm |       | ASTM D7647   | >10                | 0                    | 0           | 0           |
| Oil Cleanliness |       | ISO 4406 (c) | >/18/16            | 16/14/11             | 18/13/10    | 19/14/11    |
| FLUID DEGRADAT  | ΓΙΟΝ  | method       | limit/base         | current              | history1    | history2    |
|                 |       |              |                    |                      |             |             |

Acid Number (AN)

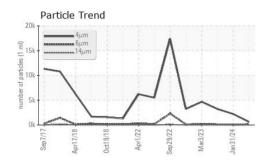
mg KOH/g ASTM D8045

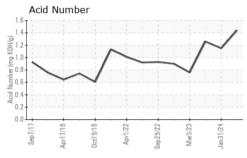
1.44 1.15

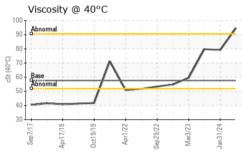
Submitted By: BRANDEN JAQUIAS

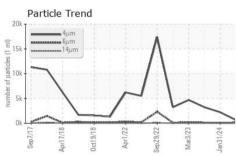


#### **OIL ANALYSIS REPORT**







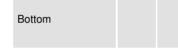


| VISUAL                  |        | method  | limit/base | current | history1 | history2 |
|-------------------------|--------|---------|------------|---------|----------|----------|
| White Metal             | scalar | *Visual | NONE       | NONE    | NONE     | NONE     |
| Yellow Metal            | scalar | *Visual | NONE       | NONE    | NONE     | NONE     |
| Precipitate             | scalar | *Visual | NONE       | NONE    | NONE     | NONE     |
| Silt                    | scalar | *Visual | NONE       | NONE    | NONE     | NONE     |
| Debris                  | scalar | *Visual | NONE       | NONE    | NONE     | NONE     |
| Sand/Dirt               | scalar | *Visual | NONE       | NONE    | NONE     | NONE     |
| Appearance              | scalar | *Visual | NORML      | NORML   | NORML    | NORML    |
| Odor                    | scalar | *Visual | NORML      | NORML   | NORML    | NORML    |
| <b>Emulsified Water</b> | scalar | *Visual | >0.1       | NEG     | NEG      | NEG      |
| Free Water              | scalar | *Visual |            | NEG     | NEG      | NEG      |
|                         |        |         |            |         |          |          |

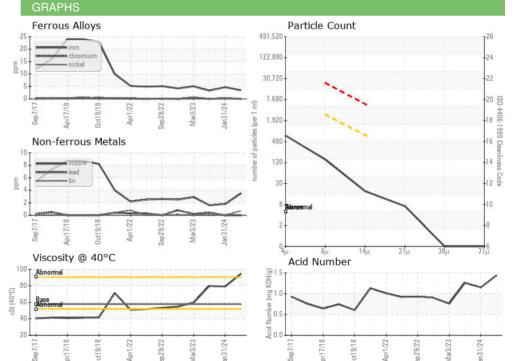
| FLUID    | PROPERI | IES | metnoa    | ilmit/base | current | nistory i | nistory2 |
|----------|---------|-----|-----------|------------|---------|-----------|----------|
| Visc @ 4 | 0°C     | cSt | ASTM D445 | 57.6       | 94.6    | 79.1      | 79.8     |

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
|               |        |            |         |          |          |

Color











Certificate 12367

Laboratory Sample No.

Lab Number : 06177075 Unique Number : 11023128

: WC0928683 Test Package : CONST

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 13 May 2024

**Tested** : 14 May 2024 Diagnosed : 14 May 2024 - Don Baldridge

SHERWOOD CONSTRUCTION CO INC

3219 WEST MAY ST WICHITA, KS US 67213

Contact: DOUG KING doug.king@sherwood.net T: (316)617-3161

To discuss this sample report, contact Customer Service at 1-800-237-1369. \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: x: